

CORPORATE TAX BURDEN COMPARISON: PAPER INDUSTRY

A. INTRODUCTION

Businesses consider a wide variety of factors in making location decisions. Because tax systems vary among states, the expected amount of tax paid is one of the factors in business location decisions.

The purpose of this report is to compare the direct business tax liabilities incurred by a hypothetical paper products manufacturing corporation (SIC 2600; NAICS 322) if it were located in 10 industrial states. Taxes included in this comparison are the corporate income, franchise, property and sales taxes. This method allows the report to isolate the impact of differences between the tax laws of each state. Accordingly, the results are sensitive to assumptions made about the hypothetical firm and to other general assumptions made in the comparison. The methodology and assumptions used in calculating the taxes are described in the appendix.

States were chosen for the comparison based on industry presence in the states, indicated by employment and value added to products produced in each state. The states included in the comparison are California, Georgia, Illinois, Minnesota, North Carolina, Ohio, Pennsylvania, Tennessee, Texas and Wisconsin. In 2006, Wisconsin will begin phasing in a formula to apportion income to the state based only on the amount of sales a company makes in Wisconsin compared to sales made everywhere and will exempt sales of fuel and electricity used in manufacturing from sales and use tax. As a result, this paper includes two Wisconsin comparisons: the first under current law and the second as if single sales factor apportionment were fully phased in and manufacturing fuel and electricity were exempt from sales and use tax.

This analysis is for illustrative purposes only. It is intended to present information on tax laws in Wisconsin and other states in a simple and easily understood manner. Actual calculations may be more complex and tax burdens may vary with consideration of additional variables or tax laws.

B. TOTAL TAX BURDEN SUMMARY

Table 1 shows the total tax liability ranking of the corporation by state, as well as the percent that each tax is of total tax. For this comparison, total tax liability is the sum of sales, property, income and franchise taxes. A ranking of 1 denotes the highest tax liability among the states compared.

TABLE 1
TOTAL TAX LIABILITY

State	Total Tax Burden		Property Tax		Income/Franchise Tax		Sales Tax	
	Amount	Rank	Amount	%	Amount	%	Amount	%
California	\$ 1,863,247	9	\$ 985,021	52.9%	\$ 162,257	8.7%	\$ 715,968	38.4%
Georgia	3,815,842	1	1,285,393	33.7%	409,275	10.7%	2,121,174	55.6%
Illinois	2,604,497	6	677,887	26.0%	230,866	8.9%	1,695,744	65.1%
Minnesota	2,079,498	8	1,006,486	48.4%	603,401	29.0%	469,611	22.6%
North Carolina	3,293,197	2	853,605	25.9%	877,539	26.6%	1,562,053	47.4%
Ohio	2,901,825	3	1,779,207	61.3%	565,685	19.5%	556,934	19.2%
Pennsylvania	1,671,948	11	383,941	23.0%	854,520	51.1%	433,487	25.9%
Tennessee	2,590,425	7	741,245	28.6%	827,497	31.9%	1,021,683	39.4%
Texas	2,878,387	4	1,945,905	67.6%	336,437	11.7%	596,045	20.7%
Wisconsin	2,725,807	5	1,049,346	38.5%	9,825	0.4%	1,666,637	61.1%
Wisconsin (2008)	1,778,820	10	1,049,346	59.0%	332,111	18.7%	397,363	22.3%

As shown in Table 1, the total tax burden is highest in Georgia and lowest in Pennsylvania. Total tax burden in Wisconsin ranks 5 under current law, but falls to 10 under recently enacted income and sales tax changes that begin in 2006 and are fully phased in place 2008. A discussion of each type of tax follows.

C. PROPERTY TAX

Table 2 shows the property tax rankings of each state for the hypothetical corporation. Table 3 summarizes property tax exemptions relating to business property and tax rates in each location.

TABLE 2
PROPERTY TAX LIABILITY

State	Amount	Rank
California	\$ 985,021	6
Georgia	1,285,393	3
Illinois	677,887	9
Minnesota	1,006,486	5
North Carolina	853,605	7
Ohio	1,779,207	2
Pennsylvania	383,941	10
Tennessee	741,245	8
Texas	1,945,905	1
Wisconsin	1,049,346	4

TABLE 3
PROPERTY TAX PROVISIONS

State	Property Tax Exemptions	Full Value Tax Rate (\$ per \$100 of taxable amount)
California	Intangibles	\$1.02
Georgia	Intangibles	1.19
Illinois	All personalty	2.67
Minnesota	All personalty	3.68
North Carolina	Intangibles	1.04
Ohio	Motor vehicles, intangibles	1.88
Pennsylvania	All personalty	1.51
Tennessee	Intangibles	1.09
Texas	Intangibles	2.56
Wisconsin	Manufacturing M&E, computers, motor vehicles, intangibles	2.00

The manufacturing activity of the hypothetical corporation holds significant value in manufacturing machinery and equipment and computers, both of which are exempt in Wisconsin. As a result, Wisconsin's property tax ranks in the middle. Illinois ranks low due to an exemption of all personal property and assessment of real property at 1/3 of its true market value. California ranks low because of its low tax rate and the effect of Proposition 13 limits on increases in assessments of long-standing properties.

D. SALES TAX

The variation among states in sales tax treatment of purchases has a significant impact on total tax costs. Exempting purchases of manufacturing inputs from sales tax, or taxing purchases at a lower rate, provides a tax incentive to invest in new equipment. In those states where input purchases are taxed at the general sales tax rate, the cost of investing in new equipment is higher than in those states that provide exemptions or lower sales tax rates.

Tables 4 and 5 show the sales tax rankings and significant provisions that would apply if the three hypothetical corporations were located in each state.

TABLE 4
SALES TAX LIABILITY

State	Tax	Rank
California	\$715,968	6
Georgia	2,121,174	1
Illinois	1,695,744	2
Minnesota	469,611	9
North Carolina	1,562,053	4
Ohio	556,934	8
Pennsylvania	433,487	10
Tennessee	1,021,683	5
Texas	596,045	7
Wisconsin	1,666,637	3
Wisconsin (2006)	397,363	11

TABLE 5
PURCHASES SUBJECT TO SALES TAX, 2004

State	Sales Tax Rate	Fuel & Electricity	Manufacturing Machinery & Equipment	Computer Equipment	Pollution Control/ Recycling Equipment
California	7.50%	No	Yes (1)	Yes	No
Georgia	7.00%	Yes	No	Yes	No
Illinois	7.50%	Yes (2)	No	Yes	No
Minnesota	6.50%	No	No (3)	Yes	No
North Carolina	7.00%	Yes (4)	Yes (5)	Yes	No
Ohio	8.25%	No	No	Yes	No
Pennsylvania	6.00%	No	No	Yes	No
Tennessee	9.35%	Yes (6)	No	Yes	No
Texas	8.25%	No	No	Yes	No
Wisconsin	5.50%	Yes	No	Yes	No
Wisconsin (2006)	5.50%	No	No	Yes	No

(1) Exempt from the 5.5% general fund portion of the state sales tax.

(2) Subject to a 5% of expenditures or therm-based excise tax.

(3) Taxable but manufacturers may apply for a refund of tax.

(4) Taxed at reduced rate ranging from 0.15 – 2.83%.

(5) Taxed at reduced rate of 1%.

(6) Taxed at reduced rate of 1.5%.

TABLE 5 (continued)
PURCHASES SUBJECT TO SALES TAX, 2004

State	Other Non-manufacturing M&E	Furniture and Fixtures	Transportation Equipment	Supplies
California	Yes	Yes	Yes	Yes
Georgia	Yes	Yes	Yes	Yes
Illinois	Yes	Yes	Yes	Yes
Minnesota	Yes	Yes	Yes	Yes
North Carolina	Yes	Yes	Yes	Yes
Ohio	Yes	Yes	Yes	No
Pennsylvania	Yes	Yes	Yes	Yes
Tennessee	Yes	Yes	Yes	Yes
Texas	Yes	Yes	Yes	Yes
Wisconsin	Yes	Yes	Yes	Yes
Wisconsin (2006)	Yes	Yes	Yes	Yes

Pennsylvania has the lowest sales tax liability under current law. When Wisconsin's exemption of fuel and electricity used in manufacturing takes effect in 2006, the hypothetical paper company will have the lowest liability in Wisconsin. Of the ten states, Pennsylvania has the second-lowest tax rate (6%) and exempts purchases of the single largest input, fuel and electricity.

Georgia imposes the highest sales tax burden on the hypothetical company, with Illinois and Wisconsin ranking second and third, respectively. Except for the tax treatment of fuel and electricity, the differences in exemptions among the ten states are minor. The taxation of fuel and electricity and differences in tax rates account for the differences in rankings.

E. INCOME/FRANCHISE TAX

Table 6 shows the corporate income/franchise tax liabilities and rankings for the hypothetical corporation. As used in this comparison, the term "income tax" includes taxes measured by net income and the term "franchise tax" refers to taxes based on capital stock, net worth or other asset-related measures, as well as annual corporate filing fees that may be paid to the Secretary of State or similar offices in the various states. This section combines the income and franchise tax liabilities because some states impose taxes that are the greater of an income or franchise tax, making a separate discussion less meaningful.

TABLE 6
INCOME/FRANCHISE TAX LIABILITY

State	Amount	Rank
California	\$ 162,257	10
Georgia	409,275	6
Illinois	230,866	9
Minnesota	603,401	4
North Carolina	877,539	1
Ohio	565,685	5
Pennsylvania	854,520	2
Tennessee	827,497	3
Texas	336,437	7
Wisconsin	9,825	11
Wisconsin (2008)	332,111	8

The largest income/franchise tax burdens occur if the company is located in North Carolina, Pennsylvania or Tennessee. All of these states impose both an income-based tax and a franchise tax on capital or property in the state.

The lowest tax burdens occur in California and Wisconsin under current law where the credit for sales tax paid on fuel and electricity used in manufacturing offsets the income tax liability but not the recycling surcharge. Although the income tax rate in California is one of the highest in this comparison, the corporation located there would have a relatively low tax burden, partially from the offset of an investment credit.

In Wisconsin, income tax liability is lower under current law than under single sales factor apportionment (effective in 2008) and the sales tax exemption for fuel and electricity used in manufacturing (effective in 2006). The credit for sales tax paid on fuel and electricity reduces income tax liability under current law below the tax liability that would be calculated under tax changes effective in 2006 and 2008. However, the tax liability of the hypothetical corporation from all of the taxes compared is lower in 2008 than under current law.

Specifically, the corporation's current tax liability before the manufacturers' sales tax credit is \$584,408. In 2008, when single sales factor apportionment is fully phased in, the corporation's Wisconsin tax liability will be \$332,086. Thus, single sales factor apportionment reduces tax by \$252,322, without regard to the current manufacturers' sales tax credit. The credit eliminates income tax liability under current law, except for the \$9,800 recycling surcharge and \$25 annual filing fee. With a sales tax exemption replacing the income tax credit for sales tax paid on fuel and electricity used in manufacturing, income tax liability rises by \$322,286, but sales tax declines by \$1,269,274. Thus, the net effect of

single sales factor apportionment and the sales tax exemption for fuel and electricity is a tax reduction of \$946,987.

Each state compared has some form of enterprise or development zone program that could provide certain tax incentives to a business locating in a zone. These incentives are typically negotiated with businesses on a case-by-case basis by the state departments of development or commerce. As such, they are not included in this comparison.

Key provisions of the income and franchise taxes appear in Tables 7 and 8. For more information, see the income and franchise tax sections of the appendix.

TABLE 7
INCOME TAX PROVISIONS

State	Highest Rate (4)	Minimum Tax (1)	Apportionment (2)	Income Tax Deduction (3)	Net Operating Loss (In Years)		Has Combined or Consolidated Reporting
					Forward	Back	
California	8.84%	\$800	Double-Weight	No	10	No	Yes
Georgia	6%	No	Double-Weight	Own	20	2	Yes
Illinois	7.3%	No	Sales	Other	12	No	Yes
Minnesota	9.8%	No	75% Sales	No	15	No	Yes
North Carolina	6.9%	No	Double-Weight	No	15	No	No
Ohio	8.5%	\$1,000	Triple-Weight	Yes	20	No	Yes
Pennsylvania	9.99%	No	Triple-Weight	No	20	No	No
Tennessee	6.5%	No	Double-Weight	Other	15	No	Yes
Texas	4.5%	No	Sales	Yes	5	No	No
Wisconsin	8.137%	No	Double-Weight	No	15	No	No
Wisconsin (2008)	8.137%	No	Sales	No	15	No	No

(1) "Minimum tax" refers to a minimum amount imposed on the regular income tax. The term does not include an alternative minimum tax similar to the federal alternative minimum tax. California and Minnesota impose an alternative minimum tax that is not part of this comparison.

(2) "Sales" refers to an apportionment formula that uses only the sales ratio to apportion income. "Double-Weight" and "Triple-Weight" refer to a formula in which the sales factor is double or triple weighted, respectively. "75% Sales" refers to a formula that weights the sales factor at 75%.

(3) "Yes" means that all state income taxes are deductible and "No" means that no state income taxes are deductible. "Other" refers to a deduction allowed for taxes paid to another state. "Own" means the state allows a deduction for its own income taxes.

(4) The highest income tax rate may include the rates of more than one tax applied to income.

Provisions that can be important in determining tax liability include the apportionment formula, deductions, including net operating losses (NOL), and the tax rate. As shown in Table 7, every state included in this comparison weights the sales factor more heavily than the other factors in the apportionment formula. There is significant variation in the highest tax rates, ranging from 4.5% in Texas to 9.99% in Pennsylvania. NOL carryforward periods range from 5 years (Texas) to 20 years (Georgia, Ohio and Pennsylvania). Only Georgia allows losses to be carried back. Every state except North Carolina, Pennsylvania, Texas and Wisconsin have some form of combined or consolidated reporting.

As shown in Table 8, most of the states compared have some form of annual filing fee, ranging from \$10 in North Carolina to \$75 in Illinois. Many states compared have a franchise tax based on capital stock or property in addition to an income tax or instead of an income tax. Only California, Minnesota, Ohio and Wisconsin do not have a franchise tax.

TABLE 8
FRANCHISE TAX PROVISIONS

State	Annual Filing Fees	Tax Base	Rate
California	\$20	-	-
Georgia	15	Stockholder's Equity	Varies
Illinois	75	Capital Stock	0.1%
Minnesota	-	-	-
North Carolina	10	Stockholder's Equity or Property	0.15%
Ohio	-	-	-
Pennsylvania	-	Capital Stock	0.699%
Tennessee	20	Stockholder's Equity or Property	0.25%
Texas	-	Capital Stock	0.25%
Wisconsin	25	-	-

APPENDIX

A. METHODOLOGY

This comparison calculates the state and local tax burden arising from the major taxes that a paper industry corporation would pay in each state, including the corporate income, franchise, property and sales taxes. For the comparisons to be meaningful, it is important to define the components of each of the major taxes.

As used in this comparison, the term "income tax" includes corporate income taxes and franchise taxes that are based on corporate net income. The term "franchise tax" includes annual filing fees and taxes that are based on capital stock, net worth or any measure other than corporate net income. While it is necessary to make these distinctions for comparison purposes across the states, use of the terminology in this way should not be interpreted to contradict the important legal distinction between the corporate income and franchise taxes.

This approach, within the limits of the assumptions applied, quantifies only the most significant tax differentials among the states. Since the comparison relies on hypothetical corporations, variations in the relationship of real property, inventories or other assets to income could have a substantial impact on the tax burdens in different states. In addition, other factors such as unemployment and worker's compensation costs, state and local taxes on individuals, transportation costs, wage rates for labor, and short-term tax and other locational incentives aimed at attracting industry all vary among the states and have an impact on the costs of doing business. These factors are beyond the scope of this comparison.

It is important to note that state and local taxes are only one of the many costs of doing business. Other significant factors affecting location decisions include the accessibility of markets, raw materials and suppliers; availability of skilled a labor force and labor costs; the availability and quality of transportation and other public services; regulatory processes; and the quality of life. It is difficult to rank taxes among the many factors due to the unique nature of each location decision. Each corporation will have its own ranking of the different factors and it is difficult to predict how often taxes will rank as an important cost of doing business.

B. ASSUMPTIONS

States and cities often offer special tax incentives to individual companies as a way to encourage companies to locate in particular areas. These incentives can apply to any tax and can significantly reduce or eliminate tax liability for a company. Because of the company-specific nature of these incentives, this comparison does not account for these special tax incentives. For purposes of this comparison, tax incentives are limited to tax provisions available to all businesses operating in a state.

1. Property Tax

General Assumptions. Property taxes are calculate for 2003/2004 (i.e., levied in 2003, payable in 2004). Table A.1 shows the property owned by the hypothetical corporation located in states under analysis. It is assumed that 90% of the property owned is located in-state and 10% located out of state. Taxes are applied for the 90% of property in the state.

TABLE A.1
ORIGINAL COST OF PROPERTY

Real Estate	
Land	\$ 4,291,514
Buildings	23,883,338
Personal Property	
Mfg. Machinery & Equipment	128,970,026
Other Non-Mfg Machinery & Equipment	21,495,004
Computer Equipment	42,485,013
Furniture & Fixtures	8,598,002
Inventory	28,809,839
Transportation	3,605,373
Intangibles	49,610,541
Total	\$ 311,748,651

The full value of property is generally assumed to be the net book value of the land and personal property accounts. This comparison applies the depreciation index factors of each state to the original cost of tangible personal property to arrive at the net book value of the property. The original cost of land is increased by 50% to reflect the impact of increases in land value on the current market value, which is usually the basis for assessment of land. However, each state may measure full value differently due to different assessment practices. Sales ratio data that compare assessments to actual sale prices are not included because comparisons are made on statewide averages. Assessment ratios are applied to calculate assessed values since states employ different practices. Assessment ratio and tax rates used for each state are described below.

California. The 2002/2003 property tax rate (including all taxing jurisdictions) was \$1.082 per \$100 of assessed value. Under Proposition 13, real property is generally assessed at 100% of its 1975/76 full value subject to an increased value of not more than 2% per year for each year since 1975/76. The analysis assumes that real commercial/industrial property in California is assessed at 74.87% of full value, based on sales ratio studies conducted by the California Board of Equalization in 2002. Personal property is assessed at 100% of full value, which is determined by California-established useful lives and depreciation factors. Intangibles are exempt. Motor vehicles are subject to a license tax in lieu of property taxes at a rate of 2% of market value.

Georgia. The analysis assumes that real and personal property is assessed at the statutory rate of 40% of fair market value. The 2003/2004 statewide average tax rate is estimated to be \$30.25 per \$1,000 of assessed value (including 0.25 state levied mill rate). The property tax applies to all real and personal property, except intangibles, which are exempt.

Illinois. Real property is assessed at 33 1/3% of fair market value. The 2001/2002 statewide average industrial tax rate was \$8.02 per \$100 of assessed value, or 2.67% of fair market value. The property tax applies only to real property. Intangibles and all personal property are exempt from taxation.

Minnesota. The 2003/2004 statewide average tax rate for industrial and commercial real property was \$137.107 per \$100 of assessed property. In addition, there is a Referendum Market Value Tax of \$0.15054 per \$100 of full market value. From 2001 the state levies property tax on certain properties. The 2003 levy was 54.109% of \$100 of assessed property and it applied to commercial and industrial property. The analysis assumes that industrial and commercial properties are assessed at the statutory rate of 1.5% of the first \$150,000 fair market value and 2% of full market value over \$150,000. While sales ratio data indicate that estimated fair market value was 92.6% of actual full value in 2003/2004, these data were not incorporated into the analysis for reasons of comparability. The property tax applies only to real property. Intangibles and all personal property are exempt from tax.

North Carolina. Real and personal property is assessed at 100% of true value. The 2003/2004 tax rate was \$1.0535 per \$100 of assessed property. Motor vehicles are appraised at a public service property rate (\$0.68 per \$100 of assessed property). Intangibles are exempt.

Ohio. Real property is assessed at 35% of full value and personal property is assessed at 25% of full value. The 2002/2003 statewide average tax rate was \$52.52 per \$1,000 of assessed value for real property and \$75.91 per \$1,000 of assessed value for personal property. The property tax applies to all real and personal property, except intangibles and transportation. There is a \$10,000 exemption against the total value of personal property.

Pennsylvania. The 2003/2004 statewide average property tax rate was 1.514% of fair market value. All personal property is exempt from taxation.

Tennessee. Industrial and commercial real property is assessed at 40% of full value; tangible industrial and commercial property is assessed at 30% of tax value. The 2003/2004 tax rate is estimated to be \$3.23 per \$100 of assessed value. Intangible property is exempt.

Texas. Property is assessed at 100% of full market value. The 2002/2003 statewide average rate is estimated to be 2.56% of full market value. The property tax applies to all real and personal property, except intangibles. Most intangibles are exempt from taxation.

Wisconsin. Real and personal property is assessed at 100% of full value. The 2003/2004 statewide average tax rate was \$20.01 per \$1,000 of full market value, or 2.001%. All classes of property are subject to the same rate. Machinery and equipment used in manufacturing, inventories, vehicles and intangibles are exempt. Beginning in 1999, certain computer equipment is exempt, including mainframe computers, minicomputers, personal computers, servers, terminals, monitors, disk drives, printers, basic operational programs, system software, prewritten software and custom software.

2. Sales Tax

General Assumptions. As used in this study, the term "sales tax" includes "use tax" and refers to one-time taxes imposed on the purchase price of items. The sales tax rate used in the comparison is the state sales tax rate plus the local tax rate.

The comparison calculates the amount of sales tax that would be paid by the hypothetical corporation on its purchases of tangible personal property (shown in Table A.2). The comparison follows the same assumption as used in the property tax

analysis that 90% of the property purchased by the multistate corporation will be located and used in the home state and therefore subject to sales tax in that state.

TABLE A.2
PURCHASES POTENTIALLY SUBJECT TO SALES TAX

Type of Purchase	Cost
Fuel & Electricity	\$25,641,889
Manufacturing Machinery & Equipment	9,672,752
Computer Equipment (Non-manufacturing)	5,158,801
Pollution Control/Recycling Equipment	859,800
Other Non-manufacturing Machinery & Equipment	859,800
Furniture and Fixtures	773,820
Transportation Equipment	708,371
Supplies	526,745
Total Purchases	\$44,201,979

Energy use is assumed to consist solely of electricity and natural gas with expenditures for natural gas accounting for 60% of the total amount spent and electricity accounting 40%. Some states tax these fuels at a reduced rate.

“Manufacturing machinery and equipment” includes items used directly in the manufacturing process. The category includes computers used in the manufacturing process while computers used for general business purposes are excluded.

"Other non-manufacturing equipment" assumes 50% of the equipment included in the category is pollution control and recycling equipment and 50% is miscellaneous non-manufacturing equipment. Other non-manufacturing equipment would include equipment used for research and development, packaging, labeling, and materials handling equipment, building maintenance and janitorial equipment, and non-computer office equipment.

“Transportation equipment” refers to licensed motor vehicles. Taxes imposed on the purchase price of such equipment are included in the sales tax calculations, even though the tax may not be referred to as a general sales tax by the state imposing the tax.

Items included in the “computer equipment” category are assumed to be office-related equipment, such as personal computers, printers, servers, and software. Computer equipment used for manufacturing or research and development is included in the M&E category.

The “furniture and fixtures” category assumes all fixtures retain their character as tangible personal property; none are incorporated into the building to become real property.

California. The comparison uses a total tax rate of 7.5%, composed of the 6.25% state rate, a 1% local rate and an assumed district tax rate of 0.25% – over three-fourths of California businesses are subject to additional district tax rates ranging from 0.125% – 0.5%. Purchases of manufacturing machinery and equipment are exempt from the general fund portion of the state tax; thus manufacturing machinery and equipment is subject to a 2% tax rate. Pollution control/recycling equipment and fuel and electricity used in manufacturing are exempt from tax.

Georgia. The state rate is 4% and three 1% local rates apply in most counties for a total rate of 7%. Purchases of machinery and equipment used in manufacturing and pollution control/recycling equipment are exempt from tax. Electricity, if the cost of electricity used directly in manufacturing exceeds 50% of the cost of all materials, is exempt. However, the hypothetical paper company would not qualify for the exemption since electricity costs of the hypothetical paper are only 40% by assumption of the total cost of fuel and electricity.

Illinois. The state rate is 6.25% and there are a variety of local rates; it is assumed the local rate is 1.25% for a total rate of 7.5%. Purchases of machinery and equipment used in manufacturing and pollution control/recycling equipment are exempt from tax. Consumption of electricity and natural gas is subject to an excise tax measured by kilowatt-hours or therms used, respectively. Self-assessing purchasers may, instead, pay 5% of fuel and electricity purchases.

Minnesota. The state rate is 6.5%. Since a local tax of 0.5% is imposed in only a handful of jurisdictions, local taxes were ignored. Purchases of machinery and equipment for manufacturing and for research and development are taxable, but a full refund is available. As such, they are considered exempt from tax for purposes of this study. Purchases of fuel and electricity used in manufacturing and in research and development are exempt from tax.

North Carolina. The state rate is 4.5% and combined local rates are 2.5% for a total rate of 7%. The state rate is reduced to 4% as of July 1, 2005. Purchases of machinery and equipment used in manufacturing are subject to a reduced rate of 1% and pollution control/recycling equipment is exempt from tax. Fuel and electricity used directly in manufacturing are taxed at a reduced state rate ranging from 0.17% – 2.83%. The comparison uses a 0.17% state rate plus the local rate of 2.5% for a total rate of 2.67% on fuel and electricity.

Ohio. The state rate is 6% and combined local rates are 2.25% for a total rate of 8.25%. The state rate is reduced to 5% as of July 1, 2005. Purchases of machinery and equipment used in manufacturing, pollution control/recycling equipment, supplies, and fuel and electricity are exempt from tax.

Pennsylvania. The state rate is 6%. Since only two counties impose a local tax, local taxes are ignored. Purchases of machinery and equipment used in manufacturing, and pollution control/recycling equipment, and fuel and electricity used in manufacturing are exempt from tax.

Tennessee. The state rate is 7% and local rates are 2.35% for a total rate of 9.35%. Purchases of machinery and equipment used in manufacturing and pollution control/recycling equipment are exempt from tax. Fuel and electricity used directly in manufacturing are taxed at a reduced state rate of 1.5%.

Texas. The state rate is 6.25% and combined local rates are 2% for a total rate of 8.25%. Purchases of machinery and equipment used in manufacturing, pollution control/recycling equipment, and fuel and electricity used in manufacturing are exempt from tax.

Wisconsin. The state rate is 5% and the local rate is 0.5% for a total rate of 5.5%. Purchases of machinery and equipment used in manufacturing and pollution control/recycling equipment are exempt from tax. Fuel and electricity used directly in manufacturing are subject to sales tax but a manufacturer may claim corporate income

tax credit in the amount of the sales tax. Beginning January 1, 2006, sales of fuel and electricity used in manufacturing are exempt from tax.

3. Corporate Income and Franchise Taxes

General Assumptions. The income tax calculations are based on a taxable year beginning on January 1, 2004. The starting point for the tax calculation is federal income before deductions for taxes because the amount of state tax deductions affects the income subject to tax in a state. Taxable income before taxes is shown in Table A.3.

TABLE A.3
INCOME TAX ASSUMPTIONS

Sales	\$ 567,815,322
Cost of Goods Sold	384,658,971
Gross Profit	183,156,351
Other Receipts	392,778
General Expenses	168,503,843
Income Before Taxes	\$ 15,045,286

The comparison assumes that the paper company is a multistate corporation that apportions some of its income to other states; it is assumed that all of the income of this corporation is subject to apportionment. The apportionment ratios used in this comparison are as follows:

- Total real and tangible property in-state / Total real and tangible property everywhere = 90%
- Total payroll costs in-state / Total payroll costs everywhere = 90%
- Sales destined for in-state purchasers / Sales destined for purchasers everywhere = 30%

The 90% ratios for property and payroll and the 30% ratio for sales reflect the assumption that the corporation sells its products on a regional or national basis. The remaining 10% of property and payroll and 70% of sales are assumed to be allocable to other states. The allocation of some property, payroll and sales to other states is not taken into consideration in computing the income tax burden of the corporation; the allocation would affect the total state tax burden of the corporation to the extent that they were subject to tax in other states.

Using these assumptions, income apportioned on the basis of the simple average of the 3 factors—property, payroll and sales—results in an apportionment percentage of 70%. This means that 70% of the income of the profitable corporation is subject to tax in states that apportion using this method. Many states require corporations to apportion most income with a formula that double-weights the sales factor. Double-weighting the sales factor reduces the apportionment percentage to 60%. Income apportioned based only on the sales factor would further reduce the apportionment percentage to 30%.

A deduction is allowed for the amount of sales tax paid in the current year on purchases of new personal property. Since states generally follow federal law, which requires sales taxes to be capitalized into the cost of the asset, the current year sales tax liability is used as a simplified proxy for the depreciation and other deductions that the hypothetical corporations would claim based on the cumulative effect of all capitalized sales tax.

Purchases of fuel and electricity used in manufacturing are deductible as part of the cost of goods sold. In the few states where such purchases are subject to sales tax, the amount of net income subject to tax is reduced by the amount of sales tax on fuel and electricity. The cost of the fuel and electricity, exclusive of sales tax, is assumed to be included in the figure for statements.

This comparison includes only tax credits available to all paper industry corporations that have made the investments or expenditures required. Special state tax credits and other incentives associated with enterprise or redevelopment zone programs are not included in the comparison. Such special tax credits are not included because of the difficulty in developing the detailed assumptions necessary to compute the tax credits, and because the credits are typically negotiated with businesses by a state department and may not be generally available or applicable to all corporations. Similarly, investment credits that require creation of additional jobs are not included.

A deduction for first year bonus depreciation is not included in this comparison because it is effective only for qualified purchases before January 1, 2005. No state in this comparison adopted the federal provision in its entirety, however a few states do allow a deduction for a portion of the federal deduction. For example, Minnesota requires that 80% of the deduction be added back to state income, North Carolina requires 70% to be added back, and Ohio requires that 5/6 of the amount be added back to income. Pennsylvania requires an add-back of the bonus depreciation, but allows a subtraction equal to 3/7 of the regular depreciation in the current year.

Some states, such as California and Minnesota, impose a corporate alternative minimum tax patterned after the federal alternative minimum tax. It is assumed that none of the corporations in the comparison are subject to the alternative minimum tax.

The term "franchise tax" as used in this comparison refers to franchise taxes based on capital stock, net worth or other asset-related measures as well as annual corporate filing fees that may be paid to the Secretary of State or similar offices in the various states. Franchise taxes measured by corporate net income are included under the income tax.

The hypothetical corporation is assumed to be a domestic corporation for franchise tax and filing fee purposes. All intangible property, such as patents and copyrights, is located in the state.

TABLE A.4
FRANCHISE TAX ASSUMPTIONS

Common Stocks &	
Paid-In Capital	\$ 37,560,197
Retained Earnings	2,156,243
Stockholder's Equity	\$ 39,716,440

California. The income tax rate is a flat 8.84%, with a minimum tax of \$800. Income is apportioned using a double-weighted sales formula, making the apportionment percentage for this comparison 60%. An investment credit, equal to 6% of the cost, is available for qualified manufacturing and research and development tangible personal property used in any stage of the manufacturing or research and development process. The credit cannot be applied to expenditures for which a sales tax exemption was claimed. Credits cannot reduce tax liability below \$800 annually. California imposes an

alternative minimum tax; this comparison assumes that the corporation is not subject to that tax.

There is no state franchise tax. However, a "Statement of Officers" must be filed annually with the Secretary of State. There is an annual filing fee of \$20 for this form.

Georgia. The income tax rate is a flat 6%. Income is apportioned using a three-factor formula that double weights the sales factor for an apportionment percentage of 60% in this comparison. Georgia income tax is deductible.

A franchise tax based on a corporation's net worth ranges from \$10 for net worth under \$200,000 to \$5,000 for net worth over \$22 million. An annual filing fee of \$15 is paid to the Secretary of State.

Illinois. Two income taxes are imposed on the same tax base: the regular income tax rate is a flat 4.8% and the personal property replacement tax is 2.5%. The total tax is equal to the sum of the two taxes. Income is apportioned using a single sales factor apportionment formula, which results in 30% of income being apportioned to the state. A standard exemption of \$1,000 is allowed under the regular income tax to the extent of the apportionment percentage.

The state franchise tax is imposed at a rate of \$1 per \$1,000 on an apportioned share of the amount of capital stock and paid-in capital, with a minimum tax of \$25 and a maximum tax of \$1 million per year. The tax is apportioned using a two-factor formula based on real and personal property (including intangibles) and sales. An annual report is filed with the Secretary of State along with a \$75 filing fee.

Minnesota. The income tax rate is a flat 9.8%. Income is apportioned based on a three-factor formula that weights the sales factor at 75% and each of the property and payroll factors at 12.5%, making the apportionment percentage 45% for this comparison. An alternative minimum tax is imposed if it exceeds the income tax; it is assumed that the hypothetical corporation is not subject to that tax.

The corporate income tax includes an additional fee based on the weighted sum of property, payroll and sales. The fee ranges from \$100 for corporations with a weighted sum of at least \$500,000 to \$5,000 for corporations with a weighted sum in excess of \$20 million. There is no annual filing fee for domestic corporations.

North Carolina. The corporate income tax rate is 6.9%. Income is apportioned using a three-factor formula that double weights the sales factor, making the apportionment percentage for this comparison 60%.

The franchise tax is imposed at the rate of \$1.50 per \$1,000 on the greater of three tax bases. The three tax bases are: (1) capital stock, surplus and undivided profits; (2) investment in tangible property in North Carolina; and (3) appraised valuation of North Carolina property subject to local taxation. A \$10 filing fee is paid to the Secretary of State.

Ohio. The corporate income tax is the greater of an income based or a net worth based calculation. The minimum tax is \$50, increasing to \$1,000 if the company has at least \$5 million of gross receipts or 300 employees in the state. The first \$50,000 of income is taxed at a rate of 5.1% and income over \$50,000 at 8.5%. Income is apportioned using

a triple-weighted sales factor formula, making the apportionment percentage for this comparison 54%.

The net worth based calculation is 4 mills of net worth (assets minus liabilities), with a \$150,000 maximum liability. Net worth is apportioned using a two-factor formula based on property and sales. The apportionment percentage for this comparison is 60%. The litter tax is 0.14 mill on net worth. There is no annual filing fee for domestic corporations.

Manufacturers are subject to an additional two-tier litter tax. Tier 1 of the litter tax is 0.11% of the first \$50,000 of taxable income plus 0.22% of income over \$50,000. Tier 2 of the litter tax is 0.14% of taxable net worth. Neither tier of the litter tax may exceed \$5,000.

Pennsylvania. The corporate income tax rate is a flat 9.99%. Income is apportioned using a three-factor formula that triple-weights the sales factor, which apportions 54% of income to the state.

Corporations pay a franchise tax based on capital stock. The tax rate is 0.699%. The tax is apportioned based on an equally-weighted three factor formula, making the apportionment percentage 70% for this comparison. Manufacturers are allowed an exemption for a portion of the tax. It is assumed that 20% of the amount of capital that would otherwise be subject to tax is actually taxed as a result of the exemption. There is no other annual filing fee.

Tennessee. The corporate income tax rate is a flat 6.5%. Income is apportioned using a three-factor formula that double-weights the sales factor. As such, the apportionment percentage for this comparison is 60%. A nonrefundable credit is available for 1% of the purchase price of machinery and computers used directly and indirectly in the manufacturing process, but may not exceed 50% of tax liability.

The franchise tax is imposed at a rate of 0.25% on the greater of two tax bases: total capital stock, surplus and undivided profits or the value of real and tangible personal property in the state. The capital stock tax base is apportioned to the state using a formula that double weights the sales factor. The minimum tax is \$100. There is a \$20 annual filing fee paid to the Secretary of State.

Texas. The franchise tax is the greater tax of two tax base components: a taxable capital component or an earned surplus component. The apportionment formula for both tax base components uses a single gross receipts factor, which includes receipts from sales, services, rentals, royalties and other business. The apportionment percentage is 30% for this comparison.

The earned surplus component of the franchise tax includes a corporation's reportable federal taxable income and compensation paid to directors and officers for certain corporations. The earned surplus tax rate is 4.5%.

The taxable capital rate is 0.25% per year of a privilege period. Taxable capital includes the corporation's retained earnings. There is no other annual filing fee.

Wisconsin. The corporate income tax rate is a flat 7.9%. Income is apportioned using a three-factor formula that double-weights the sales factor, making the apportionment percentage for this comparison 60%. A credit is available for the amount of sales tax paid on fuel and electricity used in manufacturing. A recycling surcharge equal to 3% of

gross tax liability is imposed on corporations with more than \$4 million in gross receipts. The minimum fee is \$25; the maximum fee is \$9,800.

Beginning in 2006, Wisconsin will begin phasing in single sales factor apportionment. The sales factor will be weighted at 60% in 2006, 80% in 2007 and 100% in 2008. Fuel and electricity used in manufacturing will be exempted from the sales tax in 2006 and the credit for sales tax will be repealed. In addition, although not represented in this comparison, manufacturers that meet certain conditions may continue to use manufacturers sales tax credit carried forward from prior years to offset income in the future. Manufacturers with up to \$25,000 of unused credit may take up to 50% in each of the following two years after the credit is repealed and the sales tax exemption takes effect. Manufacturers with more than \$25,000 of unused credit will be allowed to amortize the unused credit over 15 years, beginning in 2008, if they meet certain investment tests such as retention of jobs or investment in depreciable tangible personal property. Because of these significant changes, a separate comparison is done for Wisconsin that assumes single sales factor apportionment is fully phased in and the credit for fuel and electricity is replaced with a sales tax exemption.

There is no franchise tax. A \$25 annual filing fee is paid to the Secretary of State for annual returns filed electronically. The fee is \$40 for filing paper returns.